

## Analytical Report

Sample ID	835 - Analysis Service - A0054
Expected	4F-MPH
Sample adulterated?	No
Sample Appearance	
Sample type	Service -
Date of sample receipt	25-Jan-2024
Date of analysis	28-Jan-2024
Date of Report	29-Jan-2024

### Qualitative and Quantitative Results

Substances identified	Harm Reduction information	Chemical Class	Pubchem ID	analytical techniques used
4F-MPH 86% (38.7% (±)-threo-4F-MPH and 47.3% (±)-erythro-4F-MPH *	<a href="https://en.wikipedia.org/wiki/Lysergic_acid_methy">https://en.wikipedia.org/wiki/Lysergic_acid_methy</a>	Other	<a href="https://pubchem.ncbi.nlm.nih.gov/compound/11414860">11414860</a>	FTIR/LCMS/NMR

**Comment:** *The compound is composed of a mixture of two diastereomers, (38.7% (±)-threo-4F-MPH and 47.3% (±)-erythro-4F-MPH) . The threo isomer is considered more desirable due to higher activity. More information published by McLaughlin et al 2016 <http://dx.doi.org/10.1002/dta.2167> .*

\* uncertainty of measurement +/- 5 %

***The Analysis Report is not a warranty or advertisement for the quality of any supplier or product!  
We do not claim nor make any guarantees or recommendations regarding the safety of the analysed samples for human consumption.***

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Detailed information regarding our workflow including a full description of the analytical methods applied

is freely available under <https://www.kykeonanalytics.com/services/users/>

Attachments: -  
-  
-



**KYKEON**  
**ANALYTICS**

Result: 4F-MPH 86% Internal Standard: TMB

2024-01-25T19:44:55+0100

NMReady 100/nanalysis-oc162

DMSO-d6

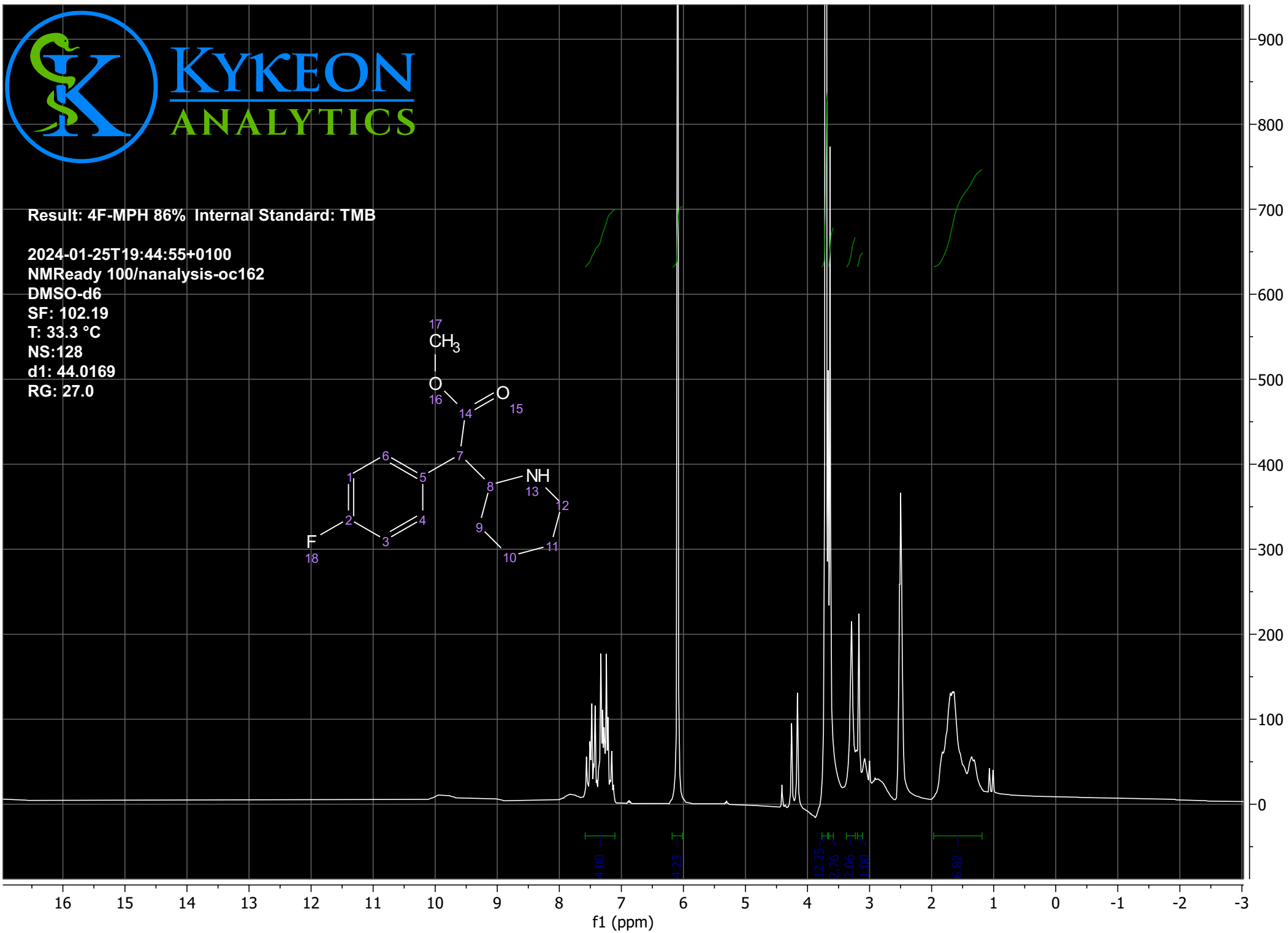
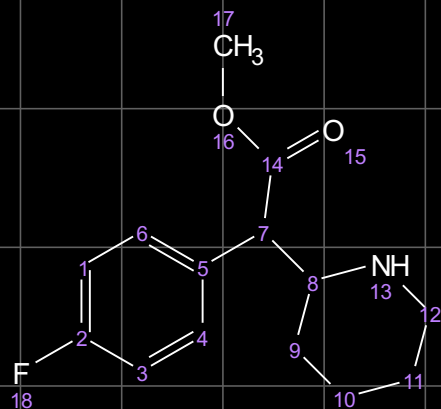
SF: 102.19

T: 33.3 °C

NS:128

d1: 44.0169

RG: 27.0



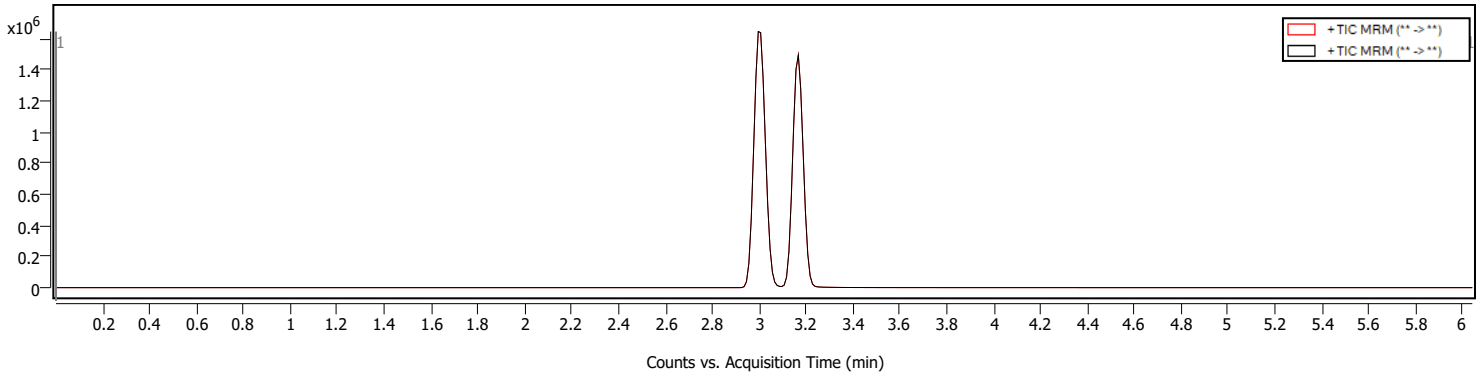
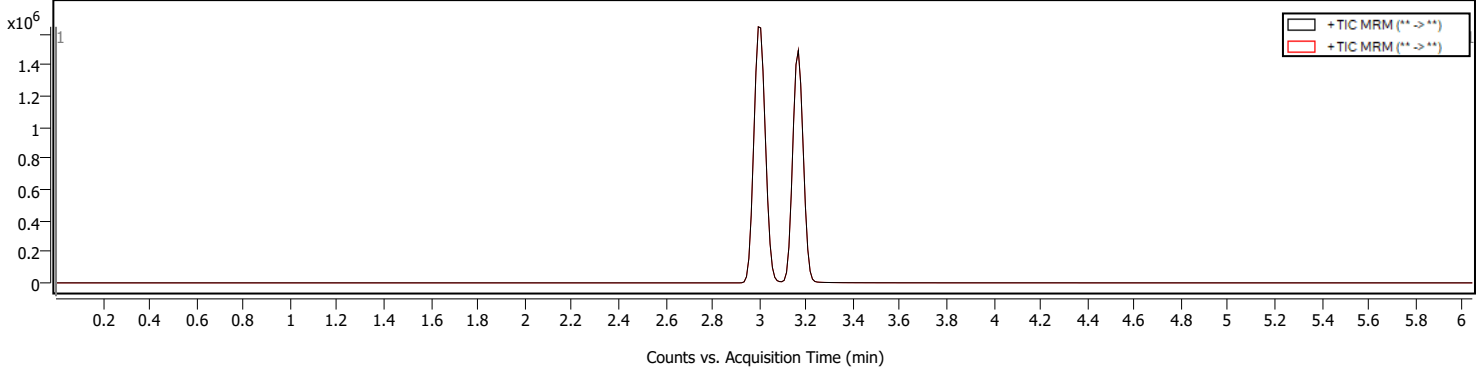
# Qualitative Analysis Report



## Sample Information

<b>Name</b>	835_4F-MPH	<b>Data File Path</b>	D:\Kykeon\Data\2024\01-25\835_4F-MPH.d
<b>Sample ID</b>		<b>Acq. Time (Local)</b>	1/25/2024 4:21:15 PM (UTC+01:00)
<b>Instrument</b>	Instrument 1	<b>Method Path (Acq)</b>	D:\Kykeon\methods\substances\4F-MPH.m
<b>MS Type</b>	QQQ	<b>Version (Acq SW)</b>	Ultivo LC/TQ C.01.00 (B1677.1 SR1)
<b>Inj. Vol. (ul)</b>	1	<b>IRM Status</b>	
<b>Position</b>	P2-E4	<b>Method Path (DA)</b>	D:\Kykeon\methods\ReportWorkflowMethod-MRM.m
<b>Operator</b>		<b>Result Summary</b>	1 qualified (1 targets)

## Sample Chromatograms



## Compound Summary

Cpd	Name	Formula	Mass	RT	Area	m/z	Algorithm
1	4F-MPH			2.999	5585579	252.1	MRM

# Qualitative Analysis Report

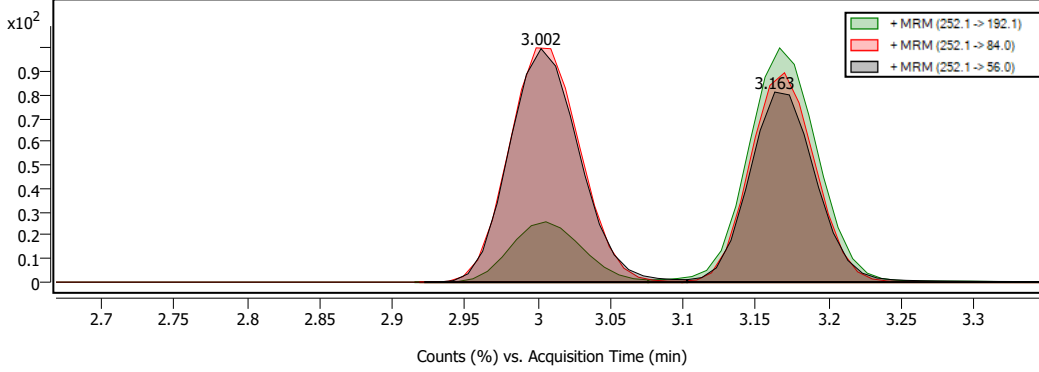


## Compound Details

### Cpd. 1: 4F-MPH

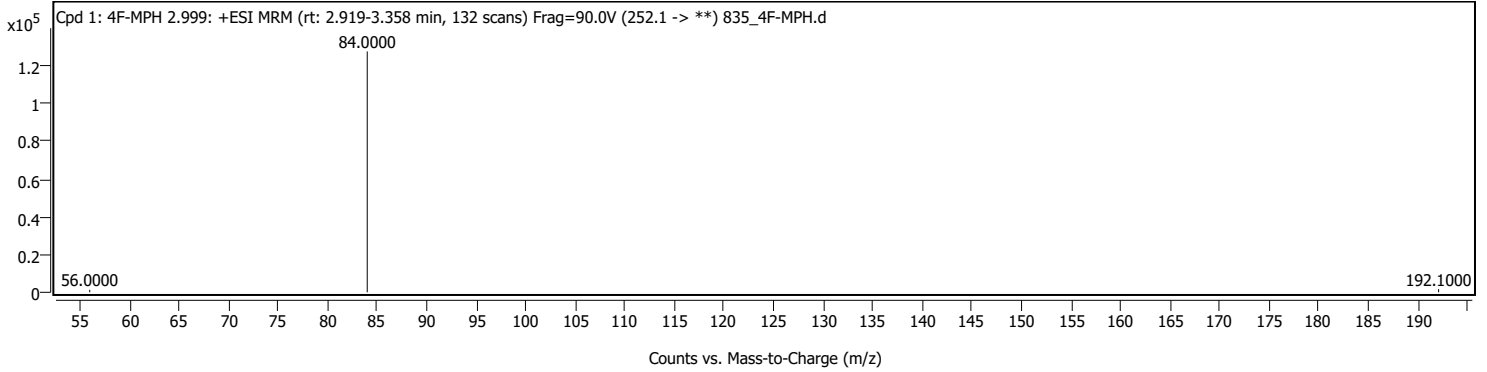
Name	Formula	Mass	RT	Area	m/z	m/z (primary prod.)	CE	FV	Algorithm
4F-MPH			2.999	5585579	252.1	84.0	20.00		MRM

### Compound Chromatograms (overlaid)

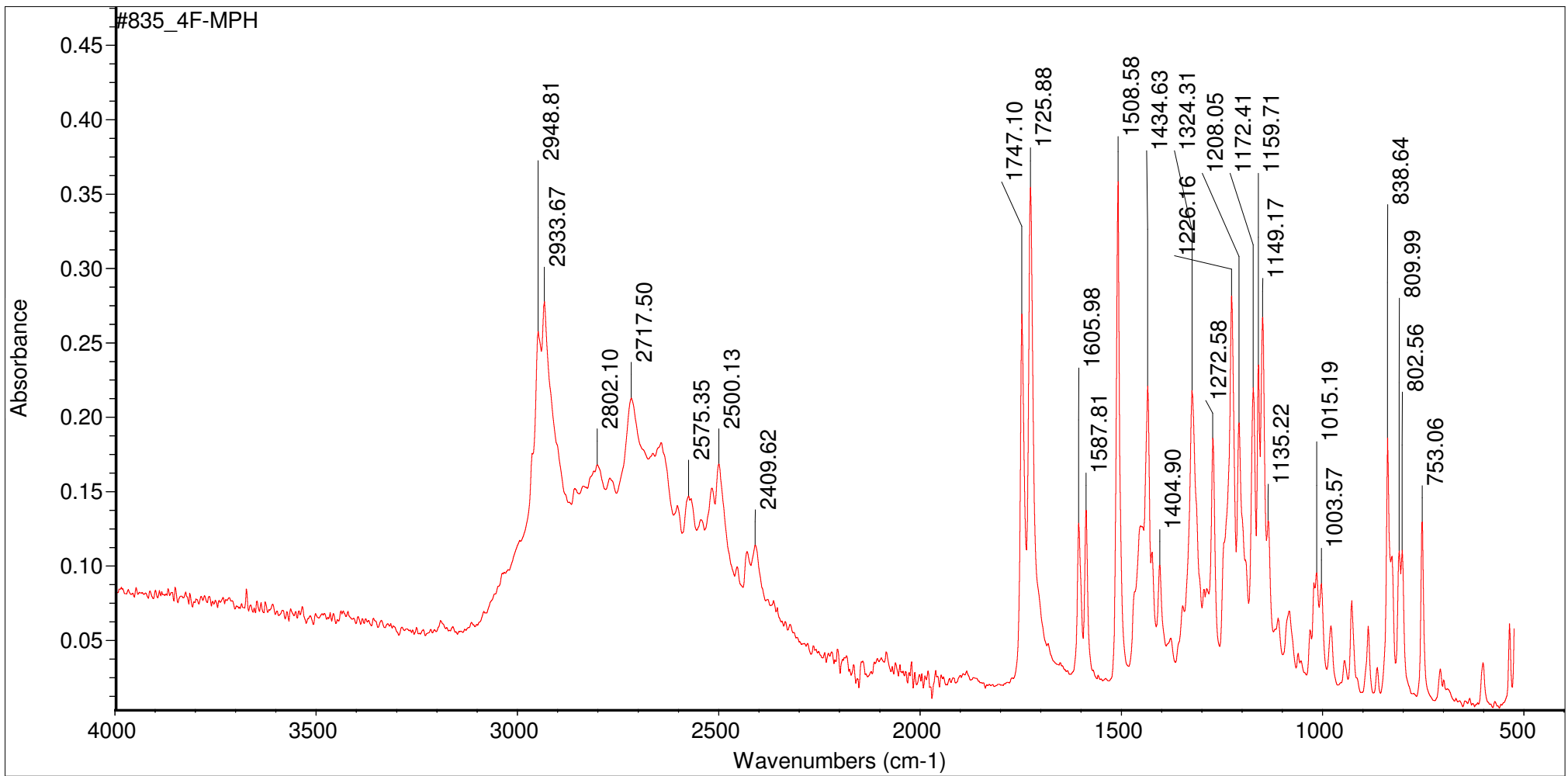


Structure

### MS/MS Spectra



MassHunter Qual 10.0  
(End of Report)



Thu Jan 25 11:38:04 2024 (GMT+01:00)

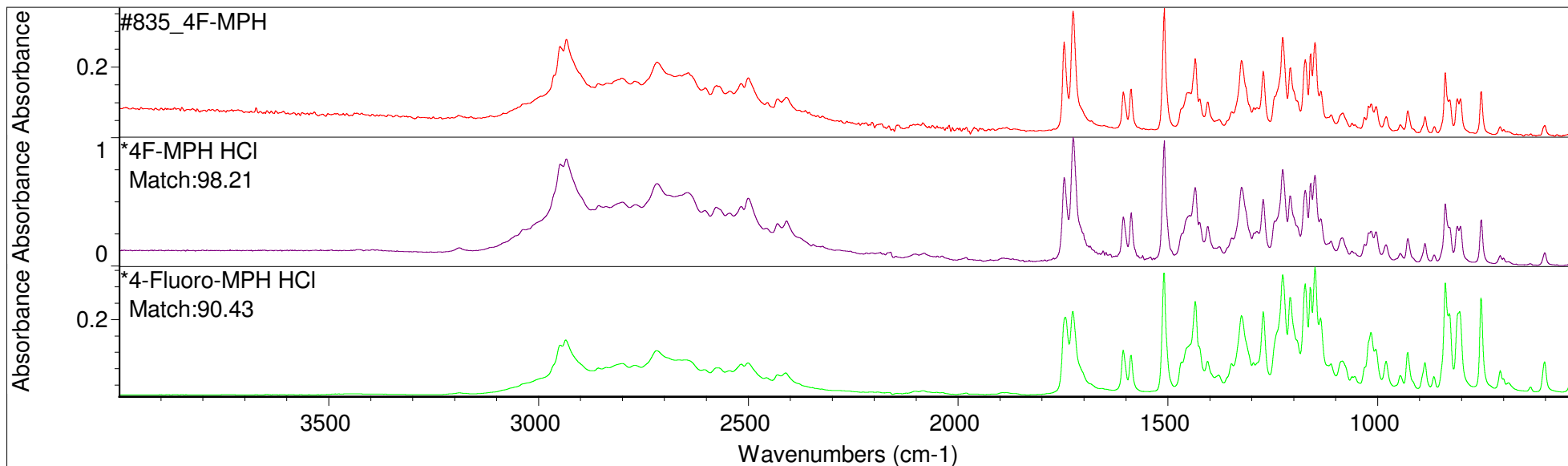
FIND PEAKS:

Spectrum: #835\_4F-MPH  
 Region: 4000.00 400.00  
 Absolute threshold: 0.086  
 Sensitivity: 50  
 Peak list:

Position:	Intensity:
753.06	0.134
802.56	0.111
809.99	0.111
838.64	0.188
1003.57	0.0889
1015.19	0.0962
1135.22	0.131

Position:	1149.17	Intensity:	0.270
Position:	1159.71	Intensity:	0.241
Position:	1172.41	Intensity:	0.220
Position:	1208.05	Intensity:	0.198
Position:	1226.16	Intensity:	0.285
Position:	1272.58	Intensity:	0.188
Position:	1324.31	Intensity:	0.219
Position:	1404.90	Intensity:	0.102
Position:	1434.63	Intensity:	0.223
Position:	1508.58	Intensity:	0.369
Position:	1587.81	Intensity:	0.141
Position:	1605.98	Intensity:	0.132
Position:	1725.88	Intensity:	0.358
Position:	1747.10	Intensity:	0.270
Position:	2409.62	Intensity:	0.114
Position:	2500.13	Intensity:	0.169
Position:	2575.35	Intensity:	0.147
Position:	2717.50	Intensity:	0.213
Position:	2802.10	Intensity:	0.168
Position:	2933.67	Intensity:	0.278
Position:	2948.81	Intensity:	0.258

Search results for: #835\_4F-MPH  
 Date: Thu Jan 25 11:38:24 2024 (GMT+01:00)  
 Search algorithm: Correlation  
 Regions searched: 3495.26-700.00



Search results list of matches

Index	Match	Compound Name	Library Name
1	117	98.21 *4F-MPH HCl	KykeonAnalytics November 2023
2	334	90.43 *4-Fluoro-MPH HCl	RESPONSE ATR
3	257	90.43 #1669n - 4-fluoromethylphenidate HCl / 4F-MPH HCl	ENFSI DWG Drugs Subset A
4	623	72.17 4-Fluoromethylphenidate HCl (Lot #0480761-9)	Master SFL1 FTIR library v. 082719
5	637	71.14 #2993n - 4-fluoromethylphenidate HCl / 4-Fluoro-MPH HCl	ENFSI DWG Drugs Subset A
6	390	53.45 #2104n - 4-fluoroethylphenidate base	ENFSI DWG Drugs Subset D
7	133	47.17 #1654n - CRL-40,941	ENFSI DWG Drugs Subset D
8	141	44.87 #1670n - 4-fluoromethylphenidate base / 4F-MPH base	ENFSI DWG Drugs Subset D
9	542	44.74 #2430n - 4-fluoroethylphenidate base	ENFSI DWG Drugs Subset D
10	961	44.70 #4207n - WIN-35428	ENFSI DWG Drugs Subset C